



Water-Data Report 2008

**01378400 DWARS KILL AT ANDERSON AVENUE, AT ALPINE, NJ**

HACKENSACK RIVER BASIN

LOCATION.--Lat 40°58'36", long 73°56'03" referenced to North American Datum of 1983, Alpine Borough, Bergen County, NJ, Hydrologic Unit 02030103, at foot of Anderson Avenue in Alpine, 1.6 mi southwest of Northvale, and 1.7 mi upstream of mouth.

DRAINAGE AREA.--0.35 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 2002 to current year.

GAGE.--Reference point only.

**DISCHARGE MEASUREMENTS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Date	Discharge, in ft <sup>3</sup> /s
Nov 13, 2007	0
Feb 20, 2008	0.94
Jun 12, 2008	0.02
Aug 18, 2008	0

**01378400 DWARS KILL AT ANDERSON AVENUE, AT ALPINE, NJ—Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2005 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background and Low Level Mercury Assessment special study site, NJ Department of Environmental Protection Watershed Management Area 5. Samples on Nov 2 and Mar 13 were for the Low-Level Mercury Assessment.

COOPERATION.--Physical measurements and samples for laboratory analyses on Nov 2 and Mar 13 were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 6

[QC, quality control sample. Remark codes: &lt;, less than; E, estimated.]

Date	Time	Sample medium and type	Turbdty	UV	UV	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
			Instan- taneous dis- charge, ft <sup>3</sup> /s (00061)	Tur- bidity light, det ang 90+/-30 corctd	absorb- ance, 254 nm, wat flt units (50624)			
<b>Nov</b>								
02...	1000	QC - Artificial, field blank	--	--	--	--	--	--
02...	1010	Surface water, regular	--	.3	--	--	768	5.5
02...	1020	Surface water, regular	--	--	--	--	--	--
13...	1140	Surface water, regular	.00	.3	.038	.028	755	--
<b>Feb</b>								
20...	0931	QC - Artificial, field blank	--	--	--	--	--	--
20...	1045	Surface water, regular	.94	.7	.076	.055	760	15.0
<b>Mar</b>								
13...	1005	QC - Artificial, field blank	--	--	--	--	--	--
13...	1030	Surface water, regular	--	.8	--	--	759	11.6
<b>Jun</b>								
12...	1210	Surface water, regular	.02	.7	.050	.038	761	7.7
<b>Aug</b>								
18...	1150	Surface water, regular	.00	2.5	.050	.037	759	6.6
								71

## 01378400 DWARS KILL AT ANDERSON AVENUE, AT ALPINE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 6

[QC, quality control sample. Remark codes: &lt;, less than; E, estimated.]

Date	Specif-										ANC,		
	pH, water, unfltrd field, std units (00400)	conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (25 degC)	Temper- ature, water, deg C (00020)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, filtrd, mg/L (00915)	Magnes- ium, water, filtrd, mg/L (00925)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L as SiO2 (00955)
Nov													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	6.9	145	8.0	11.0	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	7.1	132	9.0	4.5	39	9.54	3.74	.64	7.70	23	13.6	<.12	18.6
Feb													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	7.2	111	-1.5	1.3	28	6.76	2.65	.40	9.03	18	13.4	<.12	15.8
Mar													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	7.1	101	4.0	3.8	--	--	--	--	--	--	--	--	--
Jun													
12...	6.9	129	--	17.4	37	8.99	3.50	.63	8.31	31	10.5	<.12	22.0
Aug													
18...	7.0	135	--	18.4	41	10.2	3.83	.72	8.54	31	12.3	<.12	20.8

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 6

[QC, quality control sample. Remark codes: &lt;, less than; E, estimated.]

Date	Residue water, filtrd, mg/L (00945)		Residue on evap. sum of consti- tuents wat flt (70301)		Residue total at 180degC non- filter- able, mg/L (00530)		Ammonia + org-N, water, filtrd, mg/L as N (00623)		Nitrate + Ammonia water, filtrd, mg/L as N (00608)		Partic- ulate nitro- gen, water, filtrd, mg/L as N (00631)		Ortho- phosphate, water, filtrd, mg/L as P (49570)		Total nitro- gen, water, filtrd, mg/L as P (00602)		Phos- phorus, water, filtrd, mg/L as P (00671)		Phos- phorus, water, unfltrd, mg/L as P (00666)		Total carbon, susnd sediment (00694)	
Nov																						
02...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	18.9	E87	91	1	<.14	E.010	.06	<.04	--	.016	.009	.010	<.1									
Feb																						
20...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	13.4	E72	77	<1	E.10	<.010	.09	<.04	E.18	E.008	E.004	E.004	.2									
Mar																						
13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun																						
12...	13.7	87	100	1	E.08	<.010	.21	<.04	E.28	.014	.008	.013	.2									
Aug																						
18...	14.1	90	89	1	E.09	.010	.24	<.04	E.33	.016	.011	.013	.6									

## 01378400 DWARS KILL AT ANDERSON AVENUE, AT ALPINE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 6

[QC, quality control sample. Remark codes: &lt;, less than; E, estimated.]

Date	Inor-gan-ic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)	Barium, water, unfltrd recover -able, µg/L (01007)	Beryll-ium, water, unfltrd recover -able, µg/L (01012)	Boron, water, unfltrd recover -able, µg/L (01020)	Boron, water, unfltrd recover -able, µg/L (01022)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chrom-ium, water, unfltrd recover -able, µg/L (01034)	Copper, water, unfltrd recover -able, µg/L (01040)
<b>Nov</b>												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.04	<.1	1.4	--	--	--	32	--	--	--	--	--
<b>Feb</b>												
20...	--	--	--	<.06	--	--	--	--	--	--	<1.0	--
20...	<.04	.2	2.8	.11	<.60	9.5	E.02	21	22	E.01	E.27	--
<b>Mar</b>												
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--
<b>Jun</b>												
12...	<.04	.2	2.0	--	--	--	--	37	--	--	--	--
<b>Aug</b>												
18...	<.04	.6	1.8	.19	<.60	15.5	<.04	41	42	.02	E.25	--
												1.3

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 5 of 6

[QC, quality control sample. Remark codes: &lt;, less than; E, estimated.]

Date	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01049)	Manganese, water, unfltrd recover -able, µg/L (01051)	Mercury water, unfltrd recover -able, µg/L (01055)	Mercury water, unfltrd Low Level ng/L (71890) (50286)	Mercury water, unfltrd recover -able, µg/L (71900)	Nickel, water, unfltrd recover -able, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Selenium, water, unfltrd recover -able, µg/L (01147)	Silver, water, unfltrd recover -able, µg/L (01077)	Zinc, water, unfltrd recover -able, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
<b>Nov</b>												
02...	--	--	--	--	--	<.04	--	--	--	--	--	--
02...	--	--	--	--	--	1.03	--	--	--	--	--	--
02...	--	--	--	--	--	1.04	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--
<b>Feb</b>												
20...	--	<.08	--	--	<.010	--	--	<.20	--	--	<1.8	--
20...	30	--	.10	.9	--	--	<.010	--	.63	.10	<.02	--
<b>Mar</b>												
13...	--	--	--	--	--	.05	--	--	--	--	--	--
13...	--	--	--	--	--	2.84	--	--	--	--	--	--
<b>Jun</b>												
12...	--	--	--	--	--	--	--	--	--	--	--	--
<b>Aug</b>												
18...	42	--	.14	9.3	--	--	<.010	--	.58	E.08	<.02	--
												2.1

## 01378400 DWARS KILL AT ANDERSON AVENUE, AT ALPINE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO**  
**SEPTEMBER 2008**

Part 6 of 6

[QC, quality control sample. Remark codes:  
 <, less than; E, estimated.]

		Methyl- mercury water, unfltrd
		Low level
Date	ng/L (50284)	
<b>Nov</b>		
02...	<.04	
02...	<.04	
02...	<.04	
13...	--	
<b>Feb</b>		
20...	--	
20...	--	
<b>Mar</b>		
13...	<.04	
13...	<.04	
<b>Jun</b>		
12...	--	
<b>Aug</b>		
18...	--	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Ammonia	Phos-	Inor-	Chrom-				Mangan-		
		+ org-N, bed bed sed	phorus, bed sedimnt	Total bed sedimnt	Inorg- anic carbon, bed bed	Arsenic bed sedimnt	Cadmium bed sedimnt	ium, bed sedimnt	Cobalt bed sedimnt	Copper, bed sedimnt	Iron, bed sedimnt
		total, mg/kg	total, mg/kg	total, mg/kg	total, mg/kg	recover	recover	recover	recover	recover	total
		(00626)	(00668)	(00693)	(00686)	(64847)	(64847)	(01028)	(01029)	(01038)	(01043)
		as N	as P	g/kg	g/kg	ug/g	ug/g	ug/g	ug/g	ug/g	ug/g
		(00626)	(00668)	(00693)	(00686)	(64847)	(64847)	(01028)	(01029)	(01038)	(01043)
<b>Aug</b>											
18...	1150	110	1,400	1.6	<.2	1.1	.140	10	4.0	10	8,700
											4.6
											220

## 01378400 DWARS KILL AT ANDERSON AVENUE, AT ALPINE, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Mercury ug/g (71921)	Nickel, bed sedimnt recover -able, ug/g (01068)	nium, bed sedimnt recover -able, ug/g (64848)	Zinc, bed sedimnt recover -able, ug/g (01093)	Sele- nium, bed sedimnt recover -able, ug/kg (49403)	1,2-Di- methyl- naphth- alene, <2 mm,	1,6-Di- methyl- naphth- alene, <2 mm,	1Methyl- -9H- naphth- alene, <2 mm,	1- Methyl- phenan- threne, <2 mm,	1- Methyl- pyrene, bed sed bed sed bed sed bed sed <2 mm, (49398)	236Tri- methyl- naphth- alene, <2 mm, ws v nat (49410)	2,6-Di- methyl- naphth- alene, <2 mm, ws v nat (49388)	2-Ethyl- naphth- alene, bed sed bed sed bed sed bed sed <2 mm, ws v nat (49405)	2- Methyl- anthra- cene, bed sed bed sed bed sed bed sed <2 mm, ws v nat (49448)
Aug 18...	<.007	6.3	<.1	24	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	4H-Cyc- lopena- -def]- phenan- threne, bs <2mm ug/kg (49411)	9H- Fluor- ene, bed sed wsv nat ug/kg (49399)	Ace- naphth- ene, bed sed wsv nat ug/kg (49429)	Ace- naphth- ylene, bed sed wsv nat ug/kg (49428)	Anthra- cene, bed sed wsv nat field, ug/kg (49434)	Benzo- [a]- anthra- cene, bed sed wsv nat field, ug/kg (49436)	Benzo- [a]- pyrene, bed sed wsv nat field, ug/kg (49389)	Benzo- [b]- fluor- ene, bed sed wsv nat field, ug/kg (49458)	Benzo- [ghi]- peryl- ene, bed sed wsv nat field, ug/kg (49408)	Benzo- [k]- fluor- ene, bed sed wsv nat field, ug/kg (49397)	Chry- sene, bed sed wsv nat field, ug/kg (49450)	Dibenzo- -[a,h]- anthra- cene, bed sed wsv nat field, ug/kg (49461)	Fluor- anthene bed sed <2 mm wsv nat ug/kg (49466)	
Aug 18...	E2	<50	<50	E4	E5	E4	E5	E6	<50	E5	E3	<50	E6	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Indeno- [1,2,- 3-cd]- pyrene, bed sed <2 mm ug/kg (49390)	Iso- phorone bed sed wsv nat ug/kg (49400)	Naphth- alene, bed sed wsv nat ug/kg (49402)	p- Cresol, PCBs, bed sed wsv nat sedimnt ug/kg (39519)	Phenan- threne, bed sed wsv nat field, ug/kg (49451)	Phenan- threne, bed sed wsv nat field, ug/kg (49409)	Pyrene, bed sed wsv nat field, ug/kg (49393)	Bed sediment, dry svd sve dia percent <62.5um (80164)	
Aug 18...	<50	<50	<50	<5.00	<50	E2	<50	E7	2